

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

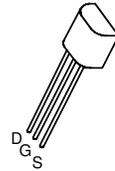
N-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

ZVN2535A

ISSUE 2 – MARCH 94

FEATURES

- * 350 Volt V_{DS}
- $R_{DS(on)}=35\Omega$



E-Line
TO92 Compatible

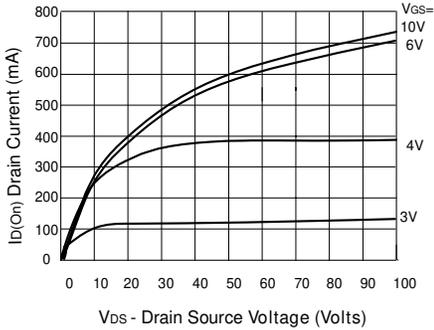
ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	350	V
Continuous Drain Current at $T_{amb}=25^{\circ}\text{C}$	I_D	90	mA
Pulsed Drain Current	I_{DM}	1	A
Gate Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$	P_{tot}	700	mW
Operating and Storage Temperature Range	$T_j:T_{stg}$	-55 to +150	$^{\circ}\text{C}$

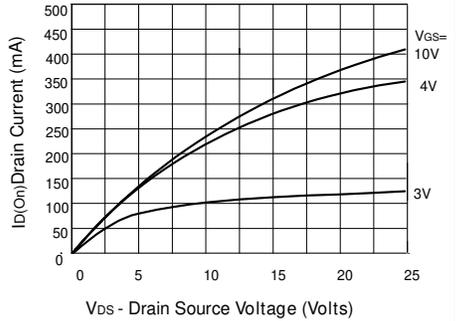
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	350		V	$I_D=1\text{mA}$, $V_{GS}=0\text{V}$
Gate-Source Threshold Voltage	$V_{GS(th)}$	1	3	V	$I_D=1\text{mA}$, $V_{DS}=V_{GS}$
Gate-Body Leakage	I_{GSS}		20	nA	$V_{GS}=\pm 20\text{V}$, $V_{DS}=0\text{V}$
Zero Gate Voltage Drain Current	I_{DSS}		10 400	μA	$V_{DS}=350\text{V}$, $V_{GS}=0$ $V_{DS}=280\text{V}$, $V_{GS}=0\text{V}$, $T=125^{\circ}\text{C}(2)$
On-State Drain Current(1)	$I_{D(on)}$	250		mA	$V_{DS}=25\text{V}$, $V_{GS}=10\text{V}$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		35	Ω	$V_{GS}=10\text{V}$, $I_D=100\text{mA}$
Forward Transconductance (1)(2)	g_{fs}	100		mS	$V_{DS}=25\text{V}$, $I_D=100\text{mA}$
Input Capacitance (2)	C_{iss}		70	pF	$V_{DS}=25\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{MHz}$
Common Source Output Capacitance (2)	C_{oss}		10	pF	
Reverse Transfer Capacitance (2)	C_{rss}		4	pF	
Turn-On Delay Time (2)(3)	$t_{d(on)}$		7	ns	$V_{DD}\approx 25\text{V}$, $I_D=100\text{mA}$
Rise Time (2)(3)	t_r		7	ns	
Turn-Off Delay Time (2)(3)	$t_{d(off)}$		16	ns	
Fall Time (2)(3)	t_f		10	ns	

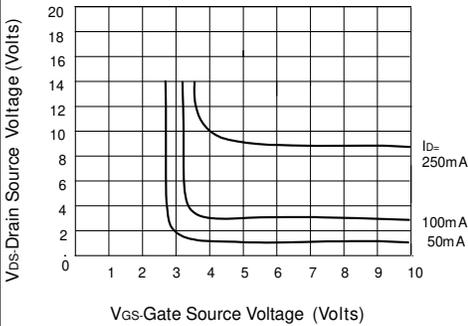
TYPICAL CHARACTERISTICS



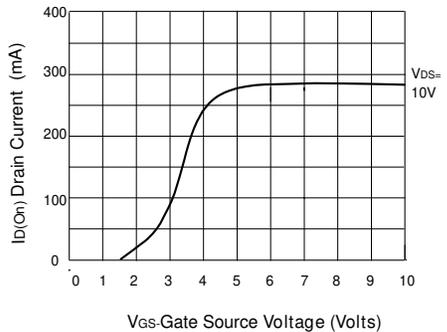
Output Characteristics



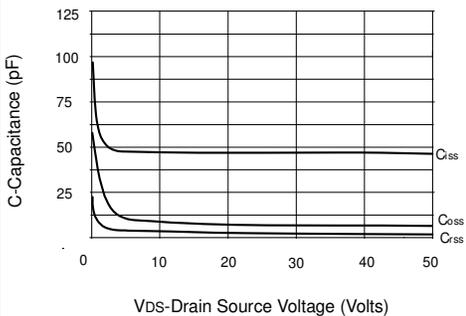
Saturation Characteristics



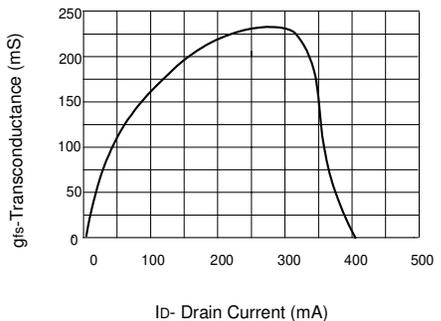
Voltage Saturation Characteristics



Transfer Characteristics



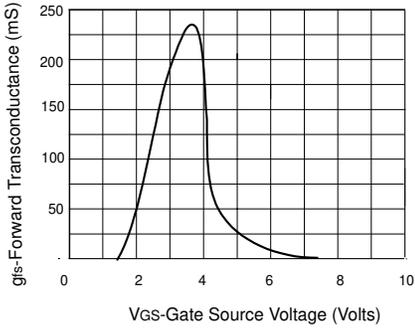
Capacitance v drain-source voltage



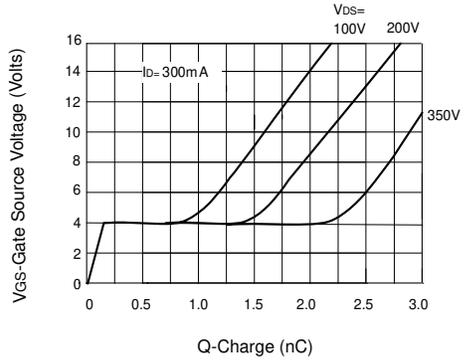
Transconductance v drain current

ZVN2535A

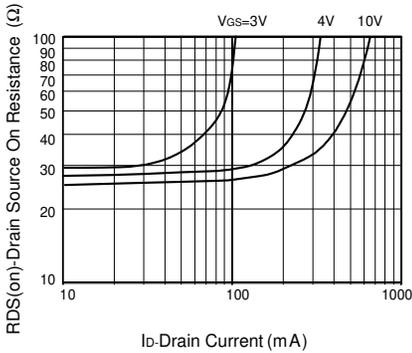
TYPICAL CHARACTERISTICS



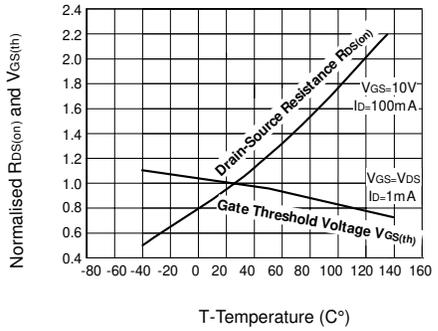
Transconductance v gate-source voltage



Gate charge v gate-source voltage



On-resistance v drain current



Normalised RDS(on) and VGS(th) vs Temperature